P-870M-Ix v2 Series

VDSL2 Modem

User's Guide

Edition 2
11/2009

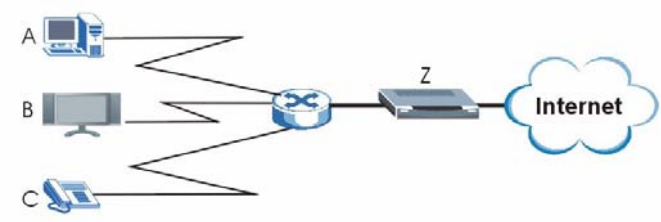
ZyXEL

Overview

The P-870M-Ix v2 Series ("P-870M-Ix v2") is a VDSL2 (Very-high-speed Digital Subscriber Line 2) modem that provides high-speed Internet access up to 100 Mbps (each way) through a telephone line and supports Triple Play services. The P-870M-Ix v2 Series consists of the following models:

- P-870M-I1 v2, a VDSL2 modem for regular (POTS) lines
- P-870M-I3 v2, a VDSL2 modem for ISDN lines

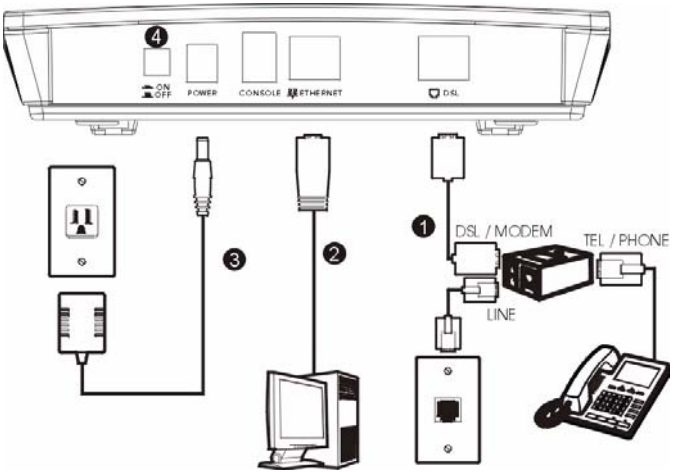
Triple Play service is the provisioning of high-speed Internet access, television (Video on Demand or regular broadcasts) and telephone service over a single broadband connection. In the following figure, the P-870M-Ix v2 (**Z**) delivers a fast VDSL Internet access connection to ensure enough bandwidth for these sevices (**A**, **B** and **C** respectively).



No configuration is required. Just connect the hardware and you are ready for high-speed Internet access.

1 Hardware Connections

Take the following steps to connect your P-870M-Ix v2.



1 Use the gray telephone wire to connect the P-870M-Ix v2 **DSL** port to the **DSL** port to a telephone jack (or a splitter, if one is already installed.)

2 Use the Ethernet cable to connect the P-870M-Ix v2 **ETHERNET** port to the computer for Internet access.

3 Use the included power adaptor to connect the P-870M-Ix v2 **POWER** socket to an appropriate power source.

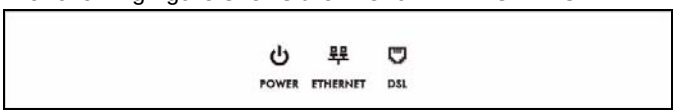
4 After you've made these connections, push in the power button.

If the **POWER**, **ETHERNET**, and **DSL** lights are on (or blinking), you have set up the P-870M-Ix v2 correctly. Test your Internet connection by visiting http://www.zyxel.com (or another web site).

If the lights behave differently or if you cannot connect to the Web site, make sure the connections are correct. If the lights are still different, turn off the device, wait a few seconds, and turn it on again. If the problem continues, contact your local vendor.

2 LEDs

The following figure shows the P-870M-Ix v2's LEDs.



The following table describes the LEDs.

Light	Status	Description
POWER	Green	The P-870M-Ix v2 is receiving power and ready for use.
	Off	The P-870M-Ix v2 is not receiving power.
ETHERNET	Green	The P-870M-Ix v2 has an Ethernet connection with a computer.
	Blinking	The P-870M-Ix v2 is sending/receiving data to /from the computer.
	Off	The P-870M-Ix v2 does not have an Ethernet connection with a computer.

Light	Status	Description
DSL	Green	The P-870M-Ix v2 has a DSL connection.
	Blinking	The P-870M-Ix v2 is trying to establish a DSL connection.
	Off	The DSL line is down.

3 Wall-mounting Instructions

Complete the following steps to hang the P-870M-Ix v2 on a wall.

1. Select a position free of obstructions on a sturdy wall.
2. Drill two holes for the screws (M3*10). The centers of the holes should be 120 mm apart.

Note: Be careful to avoid damaging pipes or cables located inside the wall when drilling holes for the screws.

3. Do not screw the screws all the way into the wall. Leave a small gap of about 0.5 cm between the heads of the screws and the wall.
4. Make sure the screws are snugly fastened to the wall. They need to hold the weight of the P-870M-Ix v2 with the connection cables.
5. Align the holes on the back of the P-870M-Ix v2 with the screws on the wall. Hang the P-870M-Ix v2 on the screws.

4 Specifications

The following values are accurate at the time of writing.

Table 1 Device Specifications

Feature	Specification
Dimensions (W x D x H)	132 mm x 189 mm x 40 mm
Weight	265 g
DSL Port	(P-870M-I1 v2) RJ11 connector for POTS (P-870M-I3 v2) RJ-45 connector for ISDN
ETHERNET Port	RJ-45 connector 10/100 Mbps Auto-sensing, auto-cross-over MDI/ MDI-X
Power Supply	12 VDC, 1 A
Power Consumption	12 W
Operation Temperature	0º C ~ 40º C
Operation Humidity	20% ~ 85% RH (non-condensing)
Storage Temperature	-20º ~ 60º C
Storage Humidity	20% ~ 90% RH (non-condensing)

5 Safety Warnings

For your safety, be sure to read and follow all warning notices and instructions.

- To reduce the risk of fire, use only No. 26 AWG (American Wire Gauge) or larger telecommunication line cord.
- Do NOT open the device or unit. Opening or removing covers can expose you to dangerous high voltage points or

other risks. ONLY qualified service personnel can service the device. Please contact your vendor for further information.

- Use ONLY the dedicated power supply for your device. Connect the power cord or power adaptor to the right supply voltage (110V AC in North America or 230V AC in Europe).
- Do NOT use the device if the power supply is damaged as it might cause electrocution.
- If the power supply is damaged, remove it from the power outlet.
- Do NOT attempt to repair the power supply. Contact your local vendor to order a new power supply.
- Place connecting cables carefully so that no one will step on them or stumble over them. Do NOT allow anything to rest on the power cord and do NOT locate the product where anyone can walk on the power cord.
- Do NOT install nor use your device during a thunderstorm. There may be a remote risk of electric shock from lightning.
- Do NOT expose your device to dampness, dust or corrosive liquids.
- Do NOT use the device near water, for example, in a wet basement or near a swimming pool.
- Make sure to connect the cables to the correct ports.
- Do NOT obstruct the device ventilation slots, as insufficient airflow may harm your device.
- Do NOT store things on the device.
- Connect ONLY suitable accessories to the device.
- Do not use the device outside, and make sure all the connections are indoors. There may be a remote risk of electric shock from lightning.

6 Related Documentation

Please go to http://www.zyxel.com for product news, firmware, documentation, and other support materials.

Need More Help?

More help is available at www.zyxel.com.

- Download Library

  Search for the latest product updates and documentation from this link. Read the Tech Doc Overview to find out how to efficiently use the User Guide, Quick Start Guide and Command Line Interface Reference Guide in order to better understand how to use your product.
- Knowledge Base

  If you have a specific question about your product, the answer may be here. This is a collection of answers to previously asked questions about ZyXEL products.
- Forum

  This contains discussions on ZyXEL products. Learn from others who use ZyXEL products and share your experiences as well.

Customer Support

Should problems arise that cannot be solved by the methods listed above, you should contact your vendor. If you cannot contact your vendor, then contact a ZyXEL office for the region in which you bought the device.

See http://www.zyxel.com/web/contact_us.php for contact information. Please have the following information ready when you contact an office.

- Product model and serial number.
- Warranty Information.
- Date that you received your device.
- Brief description of the problem and the steps you took to solve it.

Documentation Feedback

Send your comments, questions or suggestions to: techwriters@zyxel.com.tw

Thank you!

The Technical Writing Team, ZyXEL Communications Corp.,
6 Innovation Road II, Science-Based Industrial Park, Hsinchu, 30099, Taiwan.

ZyXEL Limited Warranty

ZyXEL warrants to the original end user (purchaser) that this product is free from any defects in materials or workmanship for a period of up to two years from the date of purchase. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, ZyXEL will, at its discretion, repair or replace the defective products or components without charge for either parts or labor, and to whatever extent it shall deem necessary to restore the product or components to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal or higher value, and will be solely at the discretion of ZyXEL. This warranty shall not apply if the product has been modified, misused, tampered with, damaged by an act of God, or subjected to abnormal working conditions.

Note

Repair or replacement, as provided under this warranty, is the exclusive remedy of the purchaser. This warranty is in lieu of all other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular use or purpose. ZyXEL shall in no event be held liable for indirect or consequential damages of any kind to the purchaser.

To obtain the services of this warranty, contact ZyXEL's Service Center for your Return Material Authorization number (RMA). Products must be returned Postage Prepaid. It is recommended that the unit be insured when shipped.

Any returned products without proof of purchase or those with an out-dated warranty will be repaired or replaced (at the discretion of ZyXEL) and the customer will be billed for parts and labor. All repaired or replaced products will be shipped by ZyXEL to the corresponding return address, Postage Paid. This warranty gives you specific legal rights, and you may also have other rights that vary from country to country.

Registration

Register your product online to receive e-mail notices of firmware upgrades and information at www.zyxel.com for global products, or at www.us.zyxel.com for North American products.

Viewing Certifications

1. Go to www.zyxel.com.
2. Select your product from the drop-down list box on the ZyXEL home page to go to that product's page.
3. Select the certification you wish to view from this page.

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